

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended): A method for the continuous vacuum cleaning and coating [[of]] a glass substrate, the method comprising:

generating a plasma from a gas mixture comprising predominantly oxygen with at least one linear ion source, wherein the linear ion source generates a collimated beam of ions;
[[and]]

- subjecting at least one surface portion of a glass substrate optionally associated with a layer to said plasma to at least partly eliminate, by chemical reaction, the soiling matter possibly adsorbed or located on said surface portion without removing material from the surface portion of the glass substrate such that the surface portion is sufficient for depositing a multilayer coating on the glass substrate; and

coating said at least one surface portion of the glass substrate subjected to the plasma by depositing at least one thin film multilayer without breaking vacuum, wherein said at least one thin film multilayer is for solar control, a low emissivity, electromagnetic shielding, heating, hydrophobic, hydrophilic, photocatalytic, mirror, antireflection, electrochromic, electroluminescent, and photovoltaic.
2. (Cancelled).
3. (Currently Amended): The method as claimed in claim 1[[2]], wherein the deposition process consists of said depositing comprises a cathode sputtering process.
4. (Currently Amended): The method as claimed in claim 1[[2]], wherein the

~~vacuum deposition process consists of said depositing comprises~~ a process based on CVD.

5. (Previously Presented): The method as claimed in claim 1, further comprising causing relative movement between the ion source and the substrate.

6. (Previously Presented): The method as claimed in claim 1, wherein the linear ion source is positioned with respect to the surface portion of the substrate in such a way that the average sputtering efficiency of the ionized species does not allow sputtering of said surface portion.

7. (Previously Presented): The method as claimed in claim 1, wherein the linear ion source is positioned within a plant of industrial size.

8. (Previously Presented): The method as claimed in claim 1, wherein the linear ion source generates a collimated beam of ions with an energy between 0.5 and 2.5 keV.

9. (Previously Presented): The method as claimed in claim 1, wherein it is carried out within at least one chamber intended for depositing thin films by vacuum sputtering, in a pumping chamber, or instead of a cathode, or in an intermediate chamber located between the latter items, or else within an airlock for introducing the substrates.

10. (Previously Presented): The method as claimed in claim 1, wherein two different surface portions of a substrate are cleaned simultaneously or successively, using at least said linear ion source.

Claims 11-19 (Cancelled)

20. (Currently Amended): The ~~cleaning~~ method as claimed in claim 1, wherein the at least one linear ion source is based on oxygen.

21. (Currently Amended): The ~~cleaning~~ method as claimed in claim 3, wherein the cathode sputtering process is magnetically enhanced sputtering.

22. (Currently Amended): The ~~cleaning~~ method as claimed in claim 1, wherein the linear ion source generates a collimated beam of ions with an energy between 1 and 2 keV.

23. (Currently Amended): The ~~cleaning~~ method as claimed in claim 1, wherein the linear ion source generates a collimated beam of ions with an energy at about 1.5 keV.

Claims 24- 29 (Cancelled).